

**CITY OF KIRKLAND**

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**DEPARTMENT OF PUBLIC WORKS  
PRE-APPROVED PLANS POLICY****Policy D-12: CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN**

The Construction Storm Water Pollution Prevention Plan (CSWPPP) required by the 2009 King County Surface Water Design Manual contains two parts; the Erosion and Sediment Control (ESC) Plan and the Stormwater Pollution Prevention and Spill (SWPPS) Plan. All projects meeting the threshold for a stormwater review require an ESC Plan (narrative and drawing). A condensed version of the ESC Plan elements is located in the table below for your convenience. Refer to the 2009 KCSWDM (sections 2.3.1.3 & 2.3.1.4) for complete requirements.

**A. Erosion Sediment Control (ESC) Plan (narrative and drawings) – all projects**

The ESC Plan includes both plan drawings and an ESC Report, which provides all information necessary for implementing ESC measures and meeting ESC implementation requirements. Information in the ESC Plan shall be updated during the life of the project by the ESC supervisor, or as directed by the COK inspector.

<b>ESC Plan Element</b>	<b>Information Required</b>
<b>General</b>	<ul style="list-style-type: none"> <li>• Provide details for all BMPs (from COK PW Pre-Approved Plans).</li> <li>• Include Erosion/Sedimentation Plan Notes (from COK PW Pre-Approved Plans).</li> <li>• Indicate the location of all soil pits and infiltration tests.</li> <li>• Identify areas with a high susceptibility to erosion.</li> <li>• Provide all details necessary to clearly illustrate the intent of the ESC design.</li> <li>• Include ESC measures for all on and offsite utility construction included in the project.</li> <li>• Specify the construction sequence. The construction sequence shall be specifically written for the proposed project.</li> <li>• Include an inspection and maintenance program for ESC measures, including designation of an ESC supervisor and identification of phone numbers for the 24-hour contact. This information must be provided at the pre-construction meeting.</li> <li>• Include the basis and calculations for selection and sizing of ESC measures.</li> </ul>
<b>Clearing Limits</b>	<ul style="list-style-type: none"> <li>• Delineate clearing limits, and provide details sufficient to install and maintain the clearing limits.</li> </ul>
<b>Soil Cover Measures</b>	<ul style="list-style-type: none"> <li>• Specify the type and location of temporary cover measures to be used onsite. If more than one type will be used onsite, indicate the areas where the different measures will be used, including steep cut and fill slopes. If the type of cover measures will vary depending on the time of year, soil type, gradient, or other factor, specify the conditions that control the use of the different measures.</li> <li>• Specify the type and location of permanent cover measures (this can be shown in the landscaping plan, if prepared).</li> <li>• Specify the approximate amount of cover measures necessary to cover all disturbed areas.</li> <li>• If netting, blankets, or plastic sheeting are specified, provide typical detail sufficient for installation and maintenance.</li> <li>• Specify the mulch types, seed mixes, fertilizers, and soil amendments to be used, as well as the application rate for each item.</li> <li>• For surface roughening, describe methods, equipment, and areas where surface roughening will be used.</li> </ul>
<b>Perimeter Protection</b>	<ul style="list-style-type: none"> <li>• Specify the location and type of perimeter protection to be used, and provide typical details sufficient to install and maintain the perimeter protection. Perimeter protection must be adequate to prevent or control runoff on all necessary property boundaries.</li> <li>• Indicate the location for all silt fencing, tree protection fencing, and clearing fencing.</li> </ul>
<b>Traffic Area Stabilization</b>	<ul style="list-style-type: none"> <li>• Specify the location of the construction entrance(s), and provide typical details sufficient to install and maintain the construction entrance (length, width, thickness, rock size, etc.).</li> <li>• Specify the construction roads and parking areas, and provide the measure(s) that will be</li> </ul>

	<p>used to create stabilized construction roads and parking areas. Provide sufficient detail to install and maintain.</p> <ul style="list-style-type: none"> <li>• If a wheel wash or tire bath system will be installed, provide location and typical details for installation and maintenance.</li> <li>• Provide a list of dust control procedures that will be used onsite and the location of potential application areas.</li> </ul>
<b>Sediment Retention</b>	<ul style="list-style-type: none"> <li>• Show the locations of all sediment ponds and traps</li> <li>• Provide dimensions for pond berm widths and all inside and outside pond slopes.</li> <li>• Indicate the trap/pond storage required and the depth, length, and width dimensions.</li> <li>• Provide typical section views through pond and outlet structures.</li> <li>• Include appropriate approval documentation from local sewer district if contaminated or chemically treated water will be discharged to the sanitary sewer.</li> <li>• Provide typical details of the control structure and dewatering mechanism.</li> <li>• Detail stabilization techniques for outlet/inlet protection.</li> <li>• Provide details sufficient to install cell dividers.</li> <li>• Specify mulch or recommended cover of berms and slopes.</li> <li>• Indicate the required depth gage with a prominent mark at 1-foot depth for sediment removal.</li> <li>• Indicate catch basins that are to be protected, and provide details of the catch basin protection sufficient to install and maintain.</li> </ul>
<b>Surface Water Control</b>	<ul style="list-style-type: none"> <li>• Locate all pipes, ditches, interceptor ditches, dikes, and swales that will be used to convey stormwater, and provide details sufficient to install and maintain all conveyances. Show grades, dimensions, location and direction of flow.</li> <li>• Indicate locations of outlet protection and provide details.</li> <li>• Indicate locations and outlets of any possible dewatering systems. Provide details of alternative discharge methods from dewatering systems if adequate infiltration rates cannot be achieved.</li> <li>• Indicate the location of any level spreaders and provide details sufficient to install and maintain.</li> <li>• Show all temporary pipe inverts.</li> <li>• Provide location and specifications for the interception of runoff from disturbed areas and the conveyance of the runoff to a non-erosive discharge point.</li> <li>• Provide locations of check dams and details.</li> <li>• Delineate drainage sub-basins before and after proposed construction, indicating flow direction to structural control measures with arrows. Use a bold dashed line showing developed condition.</li> <li>• Show all cut and fill slopes, indicating top/bottom of slope catch lines.</li> </ul>
<b>Critical/Sensitive Area Restrictions</b>	<ul style="list-style-type: none"> <li>• Delineate and label the following critical areas, and any applicable buffers, that are on or adjacent to the project site: flood, erosion, landslide, and steep slope hazard areas.</li> <li>• Label the location of drainage features that are on or adjacent to the project site such as streams, lakes, wetlands, roads, bogs, depressions, springs, seeps, swales, ditches, existing pipe, and seasonal water locations. Include any applicable buffers.</li> <li>• If construction creates disturbed areas within any of the above listed critical areas or associated buffers, specify the type, locations, and details of any measures or other provisions necessary to protect surface waters and steep slopes.</li> </ul>

**B. Additional requirements for project sites 1 acre or greater:**

- The Stormwater Pollution Prevention and Spill (SWPPS) Plan is required, addressing construction related pollution-generating activities. It must be kept on site during all phases of construction.
- Applicants are required to submit a Notice of Intent (NOI) to Ecology and obtain coverage under Ecology's Construction Stormwater General Permit (CSWGP); issued by the WA State Department of Ecology, as part of the Federal Clean Water Act. The Ecology permit will require a more detailed CSWPPP in their format. Applicants must submit a draft CSWPPP at COK permit submittal, and final CSWPPP at the COK Pre-Construction Meeting. For additional information, see the following Ecology website:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>